Extension Memo

Product Description: Proficiency Sample Panel 3
Catalog Number(s): C4419-Series
Lot Number: 3-3081-020041-A
New Expiration Date: 30 SEP 2030

Based on additional testing, the original date of expiration for the proficiency samples has been extended by 60 months.

The expiration dates for the following components have also been extended:

Description	Lot Number	Original Expiration Date	New Expiration Date
Proficiency Sample 102	340336	30 SEP 2025	30 SEP 2030
Proficiency Sample 115	340337	30 SEP 2025	30 SEP 2030
Proficiency Sample 134	340338	30 SEP 2025	30 SEP 2030
Proficiency Sample 168	340372	30 SEP 2025	30 SEP 2030
Proficiency Sample 205	340339	30 SEP 2025	30 SEP 2030
Proficiency Sample 244	340340	30 SEP 2025	30 SEP 2030
Proficiency Sample 277	340373	30 SEP 2025	30 SEP 2030
Proficiency Sample 314	340341	30 SEP 2025	30 SEP 2030
Proficiency Sample 323	340342	30 SEP 2025	30 SEP 2030
Proficiency Sample 356	340374	30 SEP 2025	30 SEP 2030
Proficiency Sample 370	340343	30 SEP 2025	30 SEP 2030
Proficiency Sample 418	340344	30 SEP 2025	30 SEP 2030
Proficiency Sample 435	340375	30 SEP 2025	30 SEP 2030
Proficiency Sample 442	340345	30 SEP 2025	30 SEP 2030
Proficiency Sample 478	340347	30 SEP 2025	30 SEP 2030
Proficiency Sample 482	340348	30 SEP 2025	30 SEP 2030
Proficiency Sample 493	340349	30 SEP 2025	30 SEP 2030
Proficiency Sample 503	340350	30 SEP 2025	30 SEP 2030
Proficiency Sample 512	340351	30 SEP 2025	30 SEP 2030
Proficiency Sample 525	340352	30 SEP 2025	30 SEP 2030
Proficiency Sample 562	340376	30 SEP 2025	30 SEP 2030

Extension Memo

Description	Lot Number	Original Expiration Date	New Expiration Date
Proficiency Sample 577	340353	30 SEP 2025	30 SEP 2030
Proficiency Sample 580	340354	30 SEP 2025	30 SEP 2030
Proficiency Sample 596	340355	30 SEP 2025	30 SEP 2030
Proficiency Sample 605	340356	30 SEP 2025	30 SEP 2030
Proficiency Sample 623	340357	30 SEP 2025	30 SEP 2030
Proficiency Sample 678	340358	30 SEP 2025	30 SEP 2030
Proficiency Sample 683	340359	30 SEP 2025	30 SEP 2030
Proficiency Sample 700	340360	30 SEP 2025	30 SEP 2030
Proficiency Sample 711	340377	30 SEP 2025	30 SEP 2030
Proficiency Sample 725	340361	30 SEP 2025	30 SEP 2030
Proficiency Sample 780	340362	30 SEP 2025	30 SEP 2030
Proficiency Sample 796	340363	30 SEP 2025	30 SEP 2030
Proficiency Sample 812	340364	30 SEP 2025	30 SEP 2030
Proficiency Sample 856	340365	30 SEP 2025	30 SEP 2030
Proficiency Sample 862	340366	30 SEP 2025	30 SEP 2030
Proficiency Sample 887	340367	30 SEP 2025	30 SEP 2030
Proficiency Sample 902	340368	30 SEP 2025	30 SEP 2030
Proficiency Sample 920	340369	30 SEP 2025	30 SEP 2030
Proficiency Sample 954	340370	30 SEP 2025	30 SEP 2030

Function	Name	Signature	Date
Quality	Karen Hamilla		13 Jan 2026

CERTIFICATE OF ANALYSIS

Statement: This product was manufactured and tested according to MSD documents. This lot meets MSD's specifications. This product is intended for Research Use Only. Not for use in Diagnostic Procedures.

Values are provided in two units - MSD Arbitrary Units/mL (AU/mL) and WHO Biological Arbitrary Units/mL (BAU/mL) (NIBSC 20/136)

Description	Cat #	Lot#	Expiration Date	Storage Temp.
Proficiency Sample 102	C50AED-1	340336	30 Sep 2025	≤ -70°C
Proficiency Sample 115	C50AEE-1	340337	30 Sep 2025	≤ -70°C
Proficiency Sample 134	C50AEF-1	340338	30 Sep 2025	≤ -70°C
Proficiency Sample 168	C50AFR-1	340372	30 Sep 2025	≤ -70°C
Proficiency Sample 205	C50AEG-1	340339	30 Sep 2025	≤ -70°C
Proficiency Sample 244	C50AEH-1	340340	30 Sep 2025	≤ -70°C
Proficiency Sample 277	C50AFS-1	340373	30 Sep 2025	≤ -70°C
Proficiency Sample 314	C50AEJ-1	340341	30 Sep 2025	≤ -70°C
Proficiency Sample 323	C50AEK-1	340342	30 Sep 2025	≤ -70°C
Proficiency Sample 356	C50AFT-1	340374	30 Sep 2025	≤ -70°C
Proficiency Sample 370	C50AEL-1	340343	30 Sep 2025	≤ -70°C
Proficiency Sample 418	C50AEM-1	340344	30 Sep 2025	≤ -70°C
Proficiency Sample 435	C50AFU-1	340375	30 Sep 2025	≤ -70°C
Proficiency Sample 442	C50AEN-1	340345	30 Sep 2025	≤ -70°C
Proficiency Sample 478	C50AEQ-1	340347	30 Sep 2025	≤ -70°C
Proficiency Sample 482	C50AER-1	340348	30 Sep 2025	≤ -70°C
Proficiency Sample 493	C50AES-1	340349	30 Sep 2025	≤ -70°C
Proficiency Sample 503	C50AET-1	340350	30 Sep 2025	≤ -70°C
Proficiency Sample 512	C50AEU-1	340351	30 Sep 2025	≤ -70°C
Proficiency Sample 525	C50AEV-1	340352	30 Sep 2025	≤ -70°C
Proficiency Sample 562	C50AFV-1	340376	30 Sep 2025	≤ -70°C
Proficiency Sample 577	C50AEW-1	340353	30 Sep 2025	≤ -70°C
Proficiency Sample 580	C50AEX-1	340354	30 Sep 2025	≤ -70°C
Proficiency Sample 596	C50AEY-1	340355	30 Sep 2025	≤ -70°C
Proficiency Sample 605	C50AEZ-1	340356	30 Sep 2025	≤ -70°C
Proficiency Sample 623	C50AFA-1	340357	30 Sep 2025	≤ -70°C
Proficiency Sample 678	C50AFB-1	340358	30 Sep 2025	≤ -70°C
Proficiency Sample 683	C50AFC-1	340359	30 Sep 2025	≤ -70°C
Proficiency Sample 700	C50AFD-1	340360	30 Sep 2025	≤ -70°C
Proficiency Sample 711	C50AFW-1	340377	30 Sep 2025	≤ -70°C
Proficiency Sample 725	C50AFE-1	340361	30 Sep 2025	≤ -70°C
Proficiency Sample 780	C50AFF-1	340362	30 Sep 2025	≤ -70°C
Proficiency Sample 796	C50AFG-1	340363	30 Sep 2025	≤ -70°C
Proficiency Sample 812	C50AFH-1	340364	30 Sep 2025	≤ -70°C
Proficiency Sample 856	C50AFJ-1	340365	30 Sep 2025	≤ -70°C
Proficiency Sample 862	C50AFK-1	340366	30 Sep 2025	≤ -70°C
Proficiency Sample 887	C50AFL-1	340367	30 Sep 2025	≤ -70°C
Proficiency Sample 902	C50AFM-1	340368	30 Sep 2025	≤ -70°C
Proficiency Sample 920	C50AFN-1	340369	30 Sep 2025	≤ -70°C
Proficiency Sample 954	C50AFP-1	340370	30 Sep 2025	≤ -70°C

Catalog Number: C4419-1
Lot Number: 3-3081-020041-A

CERTIFICATE OF ANALYSIS

Assignments with IgG

	Concentration (AU/mL)																
Description	**SARS-CoV-2 Spike**	**SARS-CoV-2 Nucleocapsid**	**SARS-CoV-2 S1 RBD**	**SARS-CoV-2 S1 NTD**	**SARS-CoV-1 Spike**	**HCoV-NL63 Spike**	**HCoV-HKU1 Spike**	**HCoV-OC43 Spike**	**HCoV-229E Spike**	**Flu A/ HongKong H3**	**MERS-CoV Spike**	**Flu B/ Brisbane HA**	**Flu A/ Shanghai H7**	**Flu A/ Michigan H1**	**Flu B/ Phuket HA**	**RSV Pre-Fusion F**
Proficiency Sample 102	307,000	400,000	94,700	3,830	13,800	8,470	28,100	200,000	24,900	38,800	N/A	163,000	7,390	53,000	158,000	220,000
Proficiency Sample 115	137,000	408,000	47,600	2,030	8,050	8,330	9,830	170,000	38,100	58,300	8,040	117,000	8,390	99,000	107,000	180,000
Proficiency Sample 134	171,000	97,900	44,600	2,500	N/A	8,500	140,000	612,000	35,300	12,900	N/A	18,500	6,090	32,600	11,200	145,000
Proficiency Sample 168	61.4	6,070	39.1	2.02	56.7	11,700	4,800	45,600	62,600	52,700	162	85,800	4,530	127,000	237,000	133,000
Proficiency Sample 205	123,000	378,000	19,800	1,580	25,300	5,200	28,700	151,000	63,000	92,500	53,600	145,000	6,230	89,600	194,000	56,500
Proficiency Sample 244	104,000	118,000	38,200	1,420	3,680	1,140	13,700	107,000	3,740	17,400	204	30,500	1,220	39,400	53,700	87,100
Proficiency Sample 277	55.4	96.6	41.3	1.15	87.3	9,700	5,470	45,100	29,400	78,100	849	70,600	4,930	38,900	47,600	333,000
Proficiency Sample 314	103,000	259,000	23,600	1,060	51,100	10,700	88,000	390,000	46,100	63,900	100,000	296,000	7,010	91,000	194,000	476,000
Proficiency Sample 323	23,200	144,000	7,320	321	1,160	6,670	2,350	18,300	9,370	35,700	425	17,200	822	10,000	35,500	194,000
Proficiency Sample 356	26.5	101	7.31	0.406	98.0	848	3,900	9,840	44,900	63,700	32.2	47,400	1,190	80,400	27,000	86,900
Proficiency Sample 370	21,700	100,000	7,120	345	5,710	5,300	20,800	83,900	20,200	63,400	7,730	240,000	12,300	159,000	197,000	284,000
Proficiency Sample 418	21,700	67,300	8,180	214	3,190	3,120	42,300	73,600	10,200	25,900	26,700	110,000	782	149,000	656,000	179,000
Proficiency Sample 435	104	966	14.8	1.23	109	6,820	15,000	23,000	52,700	74,300	939	123,000	9,000	91,900	66,800	270,000
Proficiency Sample 442	70,300	90,400	17,800	1,190	4,340	2,430	9,460	42,400	16,800	196,000	702	29,400	4,620	84,100	41,800	128,000
Proficiency Sample 478	18,400	11,100	8,700	158	1,370	1,550	20,000	60,400	16,000	52,800	1,560	160,000	2,540	381,000	188,000	278,000
Proficiency Sample 482	46,000	25,800	20,600	425	11,000	5,360	42,500	200,000	124,000	178,000	14,000	84,900	37,600	124,000	90,300	411,000
Proficiency Sample 493	18,400	30,800	7,720	285	1,660	3,440	5,260	47,200	16,200	16,600	167	7,600	3,240	27,800	13,900	53,800
Proficiency Sample 503	16,200	67,200	4,880	306	1,770	4,020	8,250	63,900	12,600	23,500	1,820	79,100	5,710	56,800	39,100	96,100
Proficiency Sample 512	19,600	27,700	8,290	263	1,330	4,540	20,500	36,900	29,700	28,900	356	52,500	2,820	57,600	58,900	232,000
Proficiency Sample 525	38,100	44,800	13,500	584	4,610	27,500	19,200	73,500	60,900	70,900	474	351,000	15,100	115,000	159,000	596,000
Proficiency Sample 562	24.7	158	10.2	0.280	12.1	2,630	2,050	22,400	17,500	49,400	48.5	80,700	4,170	87,900	336,000	116,000
Proficiency Sample 577	39,700	32,700	15,300	558	4,320	6,120	21,900	143,000	27,000	236,000	10,600	98,300	6,780	106,000	45,600	78,100
Proficiency Sample 580	17,400	157,000	5,590	249	7,700	19,500	30,300	118,000	59,400	54,200	N/A	120,000	10,500	27,500	82,400	639,000
Proficiency Sample 596	24,700	238,000	9,040	464	2,970	3,200	19,300	22,500	20,300	23,400	N/A	94,700	3,390	48,600	96,900	120,000
Proficiency Sample 605	28,100	201,000	4,150	875	8,720	5,990	53,900	151,000	40,300	15,000	N/A	48,900	2,210	18,500	62,900	418,000
Proficiency Sample 623	26,400	103,000	8,260	438	5,790	7,600	75,800	205,000	29,600	24,100	N/A	144,000	3,800	25,400	71,100	292,000
Proficiency Sample 678	27,100	17,700	9,330	479	2,210	5,010	7,510	35,300	21,000	9,330	N/A	10,200	3,540	12,000	9,500	91,000
Proficiency Sample 683	16,300	83,900	4,030	193	2,140	13,400	21,200	98,500	44,100	60,200	N/A	104,000	4,900	94,800	98,000	248,000
Proficiency Sample 700	14,200	62,900	4,720	171	2,550	7,760	51,000	51,000	67,100	70,200	N/A	70,800	14,200	40,300	102,000	220,000
Proficiency Sample 711	29.0	761	13.7	0.551	20.3	3,120	64,900	35,000	11,600	42,800	180	94,400	5,570	76,900	113,000	147,000
Proficiency Sample 725	26,000	32,700	6,880	641	4,100	7,230	14,500	79,900	51,700	385,000	2,100	209,000	17,600	455,000	369,000	156,000
Proficiency Sample 780	251,000	334,000	76,100	3,910	27,600	17,600	30,400	145,000	52,900	143,000	33,000	103,000	43,100	49,200	37,100	301,000
Proficiency Sample 796	29,300	29,300	8,510	559	2,430	4,240	19,800	67,800	19,200	45,600	N/A	155,000	3,930	35,900	156,000	394,000
Proficiency Sample 812	25,000	59,600	7,610	332	4,470	3,990	9,950	45,000	26,400	45,100	N/A	22,800	4,940	31,300	19,300	236,000
Proficiency Sample 856	30,200	81,300	12,000	634	5,790	10,700	36,900	94,300	17,900	28,800	N/A	43,800	15,500	80,700	53,700	318,000
Proficiency Sample 862	272,000	200,000	85,600	5,720	14,500	5,780	58,500	263,000	11,800	13,300	N/A	124,000	22,400	72,000	67,200	194,000
Proficiency Sample 887	11,400	40,500	3,780	193	2,160	6,470	31,900	77,700	71,800	46,200	N/A	58,800	6,470	36,300	389,000	418,000
Proficiency Sample 902	21,600	49,300	5,520	334	6,690	4,880	12,200	101,000	18,300	28,000	13,500	114,000	22,000	57,000	217,000	190,000
Proficiency Sample 920	9,780	51,500	3,140	163	765	1,600	8,700	38,900	22,000	65,900	N/A	72,500	1,540	66,700	81,700	40,000
Proficiency Sample 954	6,370	9,490	3,280	73.4	827	4,470	13,000	55,800	39,200	5,690	N/A	61,000	3,650	28,800	37,800	90,200

N/A = Not Applicable

CERTIFICATE OF ANALYSIS

Assignments with IgA

	Concentration (AU/mL)															
Description	**SARS-CoV-2 Spike**	**SARS-CoV-2 Nucleocapsid**	**SARS-CoV-2 S1 RBD**	**SARS-CoV-2 S1 NTD**	**SARS-CoV-1 Spike**	**HCoV-NL63 Spike**	**HCoV-HKU1 Spike**	**HCoV-OC43 Spike**	**HCoV-229E Spike**	**Flu A/ HongKong H3**	**MERS-CoV Spike**	**Flu B/ Brisbane HA**	**Flu A/ Shanghai H7**	**Flu A/ Michigan H1**	**Flu B/ Phuket HA**	**RSV Pre-Fusion F**
Proficiency Sample 102	9,480	33,600	8,310	1,660	2,800	9,950	7,530	32,400	23,200	17,200	869	5,530	11,800	20,000	11,400	108,000
Proficiency Sample 115	4,810	2,270	2,580	1,450	726	1,040	2,490	16,500	N/A	2,000	648	8,110	993	4,110	7,370	15,800
Proficiency Sample 134	9,110	4,510	4,630	2,730	8,760	3,660	27,700	49,500	1,870	N/A	7,540	3,840	7,230	1,620	2,720	132,000
Proficiency Sample 168	N/A	N/A	N/A	N/A	N/A	407	N/A	1,540	3,470	1,420	N/A	2,050	262	1,530	1,750	8,360
Proficiency Sample 205	3,890	15,000	1,820	669	N/A	536	3,130	11,000	2,060	2,460	2,890	7,320	366	1,070	28,500	17,000
Proficiency Sample 244	20,900	20,700	16,100	1,310	N/A	662	16,900	58,800	3,660	22,700	1,850	5,800	14,100	10,700	7,630	29,600
Proficiency Sample 277	N/A	N/A	N/A	N/A	N/A	4,020	3,330	14,500	5,920	N/A	1,670	5,370	1,490	10,200	5,500	51,500
Proficiency Sample 314	12,900	27,300	3,830	1,590	5,140	2,780	4,080	15,400	4,830	3,540	N/A	253,000	485	628	14,300	77,300
Proficiency Sample 323	2,680	4,860	1,140	622	N/A	463	995	2,620	829	6,020	3,460	552	195	440	1,880	19,300
Proficiency Sample 356	2,730	N/A	2,160	335	391	665	1,350	N/A	7,710	N/A	N/A	2,440	268	779	1,970	4,170
Proficiency Sample 370	2,400	9,440	1,890	263	N/A	601	1,220	N/A	6,230	7,260	1,200	2,430	6,970	12,200	2,200	119,000
Proficiency Sample 418	1,410	564	818	227	146	136	373	557	505	1,030	1,110	6,300	148	2,780	4,060	8,260
Proficiency Sample 435	N/A	N/A	N/A	N/A	N/A	N/A	977	1,490	3,360	2,410	N/A	4,470	1,160	2,340	3,670	6,370
Proficiency Sample 442	3,210	3,390	1,800	1,330	N/A	286	2,980	2,550	509	11,300	1,090	22,500	731	1,690	34,500	33,400
Proficiency Sample 478	3,520	2,270	3,490	348	236	286	1,130	5,780	2,260	3,130	1,660	3,630	273	4,270	5,120	14,000
Proficiency Sample 482	4,940	287	1,470	255	181	802	2,210	6,380	3,140	3,530	N/A	8,860	2,310	1,790	5,370	67,000
Proficiency Sample 493	1,720	1,140	928	359	187	451	1,010	N/A	2,310	4,060	1,360	14,800	690	12,000	20,300	33,600
Proficiency Sample 503	1,220	1,910	900	246	189	1,840	2,690	5,920	624	3,680	N/A	5,600	2,640	1,370	2,670	25,400
Proficiency Sample 512	5,420	789	2,460	2,100	151	410	1,120	1,560	3,850	820	579	5,410	41.3	853	3,810	25,700
Proficiency Sample 525	13,000	4,260	11,100	727	419	11,800	8,610	10,500	49,500	56,800	3,900	58,400	3,660	17,500	53,600	77,600
Proficiency Sample 562	N/A	N/A	N/A	N/A	N/A	1,530	1,570	1,160	4,010	2,940	N/A	1,800	1,850	2,460	8,010	20,900
Proficiency Sample 577	11,600	392	7,210	532	507	1,040	2,890	4,970	1,830	10,100	N/A	8,890	4,940	2,160	8,450	19,000
Proficiency Sample 580	6,000	2,510	1,510	516	4,190	1,800	6,690	52,400	3,150	9,750	N/A	8,460	1,350	2,250	11,300	23,200
Proficiency Sample 596	945	715	896	146	151	258	405	1,040	915	653	1,400	1,700	350	653	2,260	7,690
Proficiency Sample 605	14,000	2,910	8,090	3,120	2,910	1,120	6,410	11,700	4,520	1,080	N/A	48,400	239	757	46,000	43,000
Proficiency Sample 623	4,710	11,500	2,590	1,560	1,390	1,730	N/A	12,500	4,830	1,330	N/A	6,440	839	5,200	4,370	14,800
Proficiency Sample 678	1,300	669	556	257	171	1,450	567	2,770	819	154	1,960	2,420	120	762	2,730	7,590
Proficiency Sample 683	5,690	24,300	3,520	755	374	942	3,640	18,900	N/A	8,530	N/A	17,500	2,950	9,820	54,200	48,800
Proficiency Sample 700	15,200	1,690	11,100	344	370	1,530	4,190	9,720	3,190	898	N/A	10,600	713	2,750	7,300	10,900
Proficiency Sample 711	N/A	N/A	N/A	N/A	N/A	463	8,580	1,810	2,830	1,230	N/A	8,700	645	6,930	8,210	19,100
Proficiency Sample 725	6,440	1,060	5,060	1,470	321	866	677	5,030	2,330	6,200	1,640	103,000	204	13,300	222,000	44,900
Proficiency Sample 780	42,200	3,060	36,200	9,570	686	N/A	1,470	4,090	1,790	6,830	N/A	2,510	2,750	1,280	872	5,440
Proficiency Sample 796	683	254	327	194	N/A	N/A	N/A	95.5	44.6	217	139	29.1	21.5	16.1	36.6	1,170
Proficiency Sample 812	2,370	2,940	1,580	440	131	394	2,000	2,070	2,850	2,550	2,250	3,090	2,700	371	2,590	61,000
Proficiency Sample 856	2,830	2,800	1,490	728	420	929	1,900	2,970	1,010	1,120	N/A	835	779	1,840	896	51,600
Proficiency Sample 862	54,100	80,700	5,380	23,900	2,380	15,200	9,910	17,300	94,900	N/A	N/A	30,800	1,110	4,380	19,200	146,000
Proficiency Sample 887	3,090	567	3,210	440	158	108	1,320	3,050	1,530	3,840	1,080	692	647	160	2,320	27,500
Proficiency Sample 902	2,060	818	2,170	N/A	1,040	388	802	3,190	2,100	4,800	N/A	1,540	2,620	4,240	2,370	13,900
Proficiency Sample 920	1,420	1,500	796	323	114	10,700	202	899	2,120	2,750	1,490	36,700	391	10,900	85,900	6,320
Proficiency Sample 954	1,280	11,000	870	275	183	2,120	16,200	4,790	2,540	234	1,330	2,580	335	1,930	1,120	6,950

N/A = Not Applicable

Catalog Number: C4419-1
Lot Number: 3-3081-020041-A

CERTIFICATE OF ANALYSIS

Assignments with IgM

	Concentration (AU/mL)															
Description	**SARS-CoV-2 Spike**	**SARS-CoV-2 Nucleocapsid**	**SARS-CoV-2 S1 RBD**	**SARS-CoV-2 S1 NTD**	**SARS-CoV-1 Spike**	**HCoV-NL63 Spike**	**HCoV-HKU1 Spike**	**HCoV-OC43 Spike**	**HCoV-229E Spike**	**Flu A/ HongKong H3**	**MERS-CoV Spike**	**Flu B/ Brisbane HA**	**Flu A/ Shanghai H7**	**Flu A/ Michigan H1**	**Flu B/ Phuket HA**	**RSV Pre-Fusion F**
Proficiency Sample 102	4,790	984	2,450	506	232	N/A	N/A	N/A	N/A	N/A	476	N/A	72.4	96.2	N/A	335
Proficiency Sample 115	38,000	6,620	31,000	1,300	477	N/A	317	N/A	192	188	1,460	18,200	N/A	226	20,600	276
Proficiency Sample 134	8,010	2,680	6,640	306	N/A	62.0	N/A	N/A	83.6	56.2	N/A	10,700	93.9	778	11,900	523
Proficiency Sample 168	N/A	N/A	N/A	N/A	N/A	N/A	N/A	21.5	N/A	N/A	23.1	56.3	33.0	36.8	117	N/A
Proficiency Sample 205	36,300	4,620	40,400	1,010	537	18.1	117	N/A	43.6	32.1	N/A	19,200	39.5	48.8	18,400	393
Proficiency Sample 244	7,700	6,330	6,300	256	146	N/A	58.9	N/A	N/A	44.5	98.1	390	70.6	749	1,770	434
Proficiency Sample 277	N/A	N/A	N/A	N/A	194	N/A	53.0	57.5	46.0	28.1	125	951	N/A	87.5	1,500	216
Proficiency Sample 314	42,800	37,000	19,300	N/A	1,100	35.3	326	113	77.2	37.2	213	3,970	56.5	61.3	4,610	461
Proficiency Sample 323	8,690	1,680	6,930	359	345	N/A	112	118	N/A	33.9	68.5	1,090	43.3	276	1,510	297
Proficiency Sample 356	N/A	770	N/A	N/A	N/A	N/A	30.9	24.7	62.7	34.7	44.0	104	94.0	155	275	121
Proficiency Sample 370	27,200	470	34,100	86.9	56.7	N/A	75.2	N/A	N/A	27.0	27.9	1,770	N/A	202	2,210	238
Proficiency Sample 418	2,890	1,880	1,990	40.5	N/A	24.0	N/A	N/A	N/A	33.5	91.3	2,020	134	572	1,660	297
Proficiency Sample 435	N/A	N/A	N/A	N/A	N/A	N/A	22.7	60.7	N/A	N/A	73.6	222	N/A	58.5	208	73.2
Proficiency Sample 442	15,000	N/A	7,770	1,780	633	N/A	288	31.2	N/A	35.4	32.1	1,440	36.8	203	1,990	105
Proficiency Sample 478	1,750	663	1,640	63.0	111	N/A	44.2	70.7	79.4	28.2	72.7	153	N/A	292	477	129
Proficiency Sample 482	2,410	389	2,810	23.7	67.2	N/A	21.0	59.5	N/A	34.1	28.7	835	N/A	53.7	1,300	N/A
Proficiency Sample 493	1,310	2,060	746	186	131	37.7	71.2	91.7	84.7	41.2	128	1,100	43.8	172	1,860	215
Proficiency Sample 503	1,380	4,710	694	202	81.1	19.5	170	108	162	38.6	143	9,880	44.5	487	12,700	274
Proficiency Sample 512	2,720	310	1,640	30.9	322	N/A	25.5	21.2	N/A	23.9	30.6	84.4	N/A	158	254	134
Proficiency Sample 525	5,420	823	1,710	453	237	N/A	32.0	40.8	51.8	45.4	37.1	3,790	N/A	35.1	4,340	232
Proficiency Sample 562	N/A	N/A	N/A	N/A	N/A	N/A	54.0	50.5	N/A	39.3	30.8	55.3	N/A	66.2	192	215
Proficiency Sample 577	6,100	380	4,450	25.0	183	N/A	350	N/A	128	95.0	392	9,930	128	68.5	10,900	288
Proficiency Sample 580	4,180	4,370	1,520	670	359	N/A	259	571	N/A	318	1,140	N/A	210	715	N/A	N/A
Proficiency Sample 596	6,460	1,790	6,230	269	705	37.3	79.3	154	89.2	56.1	331	481	232	569	2,120	356
Proficiency Sample 605	9,150	553	9,410	120	N/A	N/A	29.7	33.4	378	42.3	177	1,230	N/A	256	1,670	116
Proficiency Sample 623	4,860	7,760	N/A	N/A	N/A	N/A	N/A	245	279	115	305	7,260	N/A	600	7,280	N/A
Proficiency Sample 678	1,610	686	1,290	60.0	145	35.6	N/A	61.8	93.9	97.7	349	3,300	61.0	N/A	4,900	189
Proficiency Sample 683	28,300	18,300	22,700	688	N/A	26.8	N/A	N/A	88.7	103	993	N/A	39.4	140	N/A	1,030
Proficiency Sample 700	2,830	23,800	8,500	90.3	470	370	356	N/A	N/A	247	792	7,270	N/A	1,590	8,810	1,020
Proficiency Sample 711	N/A	861	175	23.1	54.6	29.9	213	N/A	85.3	55.2	750	3,160	169	N/A	8,210	368
Proficiency Sample 725	5,200	1,280	5,600	175	50.8	N/A	47.0	51.6	157	N/A	146	462	271	145	682	170
Proficiency Sample 780	116,000	N/A	N/A	537	262	N/A	70.8	79.7	N/A	N/A	25.6	776	N/A	42.0	417	N/A
Proficiency Sample 796	2,460	260	2,100	31.9	192	N/A	41.6	N/A	N/A	N/A	76.7	579	N/A	137	2,070	448
Proficiency Sample 812	8,470	5,350	7,910	232	59.1	26.9	168	N/A	70.5	56.1	124	1,190	343	97.4	1,850	391
Proficiency Sample 856	6,580	265	3,910	516	234	N/A	95.8	55.3	N/A	42.1	24.5	102	N/A	165	297	192
Proficiency Sample 862	34,800	N/A	7,390	1,920	731	76.4	N/A	N/A	N/A	122	1,280	14,500	N/A	860	13,100	N/A
Proficiency Sample 887	3,510	5,060	2,660	213	88.5	N/A	76.2	72.0	N/A	N/A	52.3	113	30.8	N/A	151	203
Proficiency Sample 902	N/A	N/A	N/A	N/A	N/A	N/A	N/A	40.0	N/A	N/A	42.9	N/A	40.1	N/A	N/A	378
Proficiency Sample 920	2,350	690	1,640	36.5	75.3	21.9	99.5	N/A	55.3	N/A	105	2,210	138	366	2,210	893
Proficiency Sample 954	503	974	370	14.0	N/A	N/A	N/A	N/A	N/A	N/A	38.7	108	N/A	44.2	300	134

N/A = Not Applicable

CERTIFICATE OF ANALYSIS

	WHO Assignments with IgG			WHO Assignments with IgA			WHO Assignments with IgM		
	Concentration (BAU/mL)			Concentration (BAU/mL)			Concentration (BAU/mL)		
Description	**SARS-CoV-2 Spike**	**SARS-CoV-2 Nucleocapsid**	**SARS-CoV-2 S1 RBD**	**SARS-CoV-2 Spike**	**SARS-CoV-2 Nucleocapsid**	**SARS-CoV-2 S1 RBD**	**SARS-CoV-2 Spike**	**SARS-CoV-2 Nucleocapsid**	**SARS-CoV-2 S1 RBD**
Proficiency Sample 102	2,766	944	2,576	85.4	79.3	226	43.2	2.32	66.6
Proficiency Sample 115	1,234	963	1,295	43.3	5.36	70.2	342	15.6	843
Proficiency Sample 134	1,541	231	1,213	82.1	10.6	126	72.2	6.32	181
Proficiency Sample 168	0.553	14.3	1.06	N/A	N/A	N/A	N/A	N/A	N/A
Proficiency Sample 205	1,108	892	539	35.0	35.4	49.5	327	10.9	1,100
Proficiency Sample 244	937	278	1,039	188	48.9	438	69.4	14.9	171
Proficiency Sample 277	0.499	0.228	1.12	N/A	N/A	N/A	N/A	N/A	N/A
Proficiency Sample 314	928	611	642	116	64.4	104	386	87.3	525
Proficiency Sample 323	209	340	199	24.1	11.5	31.0	78.3	3.96	188
Proficiency Sample 356	0.239	0.238	0.199	24.6	N/A	58.8	N/A	1.82	N/A
Proficiency Sample 370	196	236	194	21.6	22.3	51.4	245	1.11	928
Proficiency Sample 418	196	159	222	12.7	1.33	22.2	26.0	4.44	54.1
Proficiency Sample 435	0.937	2.28	0.403	N/A	N/A	N/A	N/A	N/A	N/A
Proficiency Sample 442	633	213	484	28.9	8.00	49.0	135	N/A	211
Proficiency Sample 478	166	26.2	237	31.7	5.36	94.9	15.8	1.56	44.6
Proficiency Sample 482	414	60.9	560	44.5	0.677	40.0	21.7	0.918	76.4
Proficiency Sample 493	166	72.7	210	15.5	2.69	25.2	11.8	4.86	20.3
Proficiency Sample 503	146	159	133	11.0	4.51	24.5	12.4	11.1	18.9
Proficiency Sample 512	177	65.4	225	48.8	1.86	66.9	24.5	0.732	44.6
Proficiency Sample 525	343	106	367	117	10.1	302	48.8	1.94	46.5
Proficiency Sample 562	0.223	0.373	0.277	N/A	N/A	N/A	N/A	N/A	N/A
Proficiency Sample 577	358	77.2	416	105	0.925	196	55.0	0.897	121
Proficiency Sample 580	157	371	152	54.1	5.92	41.1	37.7	10.3	41.3
Proficiency Sample 596	223	562	246	8.51	1.69	24.4	58.2	4.22	169
Proficiency Sample 605	253	474	113	126	6.87	220	82.4	1.31	256
Proficiency Sample 623	238	243	225	42.4	27.1	70.4	43.8	18.3	N/A
Proficiency Sample 678	244	41.8	254	11.7	1.58	15.1	14.5	1.62	35.1
Proficiency Sample 683	147	198	110	51.3	57.3	95.7	255	43.2	617
Proficiency Sample 700	128	148	128	137	3.99	302	25.5	56.2	231
Proficiency Sample 711	0.261	1.80	0.373	N/A	N/A	N/A	N/A	2.03	4.76
Proficiency Sample 725	234	77.2	187	58.0	2.50	138	46.9	3.02	152
Proficiency Sample 780	2,262	788	2,070	380	7.22	985	1,050	N/A	N/A
Proficiency Sample 796	264	69.1	231	6.15	0.599	8.89	22.2	0.614	57.1
Proficiency Sample 812	225	141	207	21.4	6.94	43.0	76.3	12.6	215
Proficiency Sample 856	272	192	326	25.5	6.61	40.5	59.3	0.625	106
Proficiency Sample 862	2,451	472	2,328	487	190	146	314	N/A	201
Proficiency Sample 887	102.7	95.6	102.8	27.8	1.34	87.3	31.6	11.9	72.4
Proficiency Sample 902	195	116	150	18.6	1.93	59.0	N/A	N/A	N/A
Proficiency Sample 920	88.1	122	85.4	12.8	3.54	21.7	21.2	1.63	44.6
Proficiency Sample 954	57.4	22.4	89.2	11.5	26.0	23.7	4.53	2.30	10.1

N/A = Not Applicable

Name	Function	Signature	Date
Karen Hamilla	Quality		26 APR 2024

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